near the middle of the floret; caryopsis immature.

Type in the Herbarium of the Department of Biology, National Central University, Chungking, China, a rare bamboo collected on rocky place, P'ang-ch'i, Chiang-pei-hsien, Szechwan Province, February, 1938, by *Ho Ching* (without number).

This small bamboo is probably related to *Arundinaria fargesii* E. G. Camus,[8] from which it differs mainly in having a simple panicle or raceme of 4–8 spikelets and smaller florets with palea equaling its lemma. The leaf-blades of this species are also much smaller and with fewer secondary nerves on each side than in the latter species.

REFERENCE LIST OF GEOGRAPHIC AND PERSONAL NAMES

Because of the near impossibility of locating on a map of China most geographic names given in romanization only, this reference list with characters is given. The characters are assembled here rather than given in the text in order to simplify the printing problem. American botany is now handicapped by the lack of precision of our early botanists in recording type localities. Although very few people, Chinese or westerners, at this time are interested in the precise type localities of Chinese species, it seems desirable to anticipate future needs and record these localities with all possible accuracy.—E. H. WALKER.

[8] *In* Lecomte, Not. Syst. **2** (fasc. 8): 244. 1912.

Ch'a-han-ch'eng 察汗城
Chang-chia-wan 張家灣
Chia-t'an-ch'ang 夾灘場
Chiang-ching-hsien 江津縣
Chiang-pei-hsien 江北縣
Ch'ing-liang-ssŭ 清涼寺
Ch'ing-lung-tsui 青龍嘴
Chou Hao-ch'ang 周鶴昌
Erh-t'ang 二塘
Fu-lu-kuan 福祿關
Ho Ching 何景
Ho-ch'uan-hsien 合川縣
Huang-yüan-hsien 湟源縣
Keng Kuan-hou 耿寬厚
Keng Pai-chieh 耿伯介
Keng Yi-li 耿以禮
Kuan-tu 官渡
Liang-shan-hsien 梁山縣
Liang-shan-tz'ŭ 梁山慈
Ling-ying-ssŭ 靈應寺
Min-chiang 岷江
Mu-tung 木洞
Nan-ch'uan-hsien 南川縣
Pa-hsien 巴縣
Pai-sha-ching 白沙井
P'ang-ch'i 磐溪
P'eng-shan-hsien 彭山縣
Sha-p'ing-pa 沙坪壩
Shuang-tz'ŭ-ch'ang 雙賜場
Su Chia-hsun 蘇甲薰
Sun-ch'i-ho 筍溪河
Tan-ka-êrh 丹噶爾
T'ang-hsia-k'ou 湯峽口
Ts'eng Mien-chih (Tsen Mill) 曾勉之
Tung-liang-hsien 銅梁縣
Ying-t'ou-huang 硬頭黃

ENTOMOLOGY.—*Synopsis of the cerambycid beetles of the genus* Stenosphenus *Haldeman found in America, north of Mexico.*[1] W. S. FISHER, U. S. Bureau of Entomology and Plant Quarantine. (Communicated by C. F. W. MUESEBECK.)

In the process of studying and rearranging the species of *Stenosphenus* in the United States National Museum, it was found that the genus had not been treated in a synoptical way since 1885, when Horn published a table for separating the six known species. This table was republished by Leng in 1887. Since that time one species has been described by Schaeffer, five species by Casey, and four species by Linsley, and it seems advisable to bring our knowledge of the genus up to date.

[1] Received January 11, 1946.

Genus **Stenosphenus** Haldeman

Stenosphenus Dejean, Cat. Coléopt., ed. 3, p. 330 (nomen nudum). 1835; ed. 3, rev., p. 355 (nomen nudum). 1836; Haldeman, Trans. Amer. Phil. Soc. (ser. 2) **10**: 39. 1847; Chevro-

lat, *in* d'Orbigny, Dict. Hist. Nat. **12**: 13–14. 1848; Melsheimer, Cat. Coleopt. U. S., p. 104. 1853; Thomson, Classification Cérambycides, p. 372. 1860; Systema Cerambycidarum, p. 433. 1864; Lacordaire, Genera des Coléopt. **9**: 122, 130. 1869; Gemminger and Harold, Cat. Coleopt. **9**: 2957. 1872; Crotch, Check List Coleopt. North Amer., p. 87. 1873; LeConte, Smithsonian Misc. Coll. No. 265: 316–317. 1873; LeConte and Horn, Smithsonian Misc. Coll. No. 507: 301–302. 1883; Henshaw, List Coleopt. North Amer., p. 98. 1885; Horn, Trans. Amer. Ent. Soc. **12**: 177–180. 1885; Leng, Ent. Amer. **2**: 193–194. 1887; Henshaw, List Coleopt. North Amer., suppl. 3, pp. 24, 51. 1895; Blatchley, Coleoptera of Indiana, pp. 1031–1032. 1910; Aurivillius, *in* Schenkling, Coleopt. Cat., pt. 39, pp. 443–444. 1912; Leng, Cat. Coleopt. North Amer., pp. 278, 359. 1920; Leng and Mutchler, Cat. Coleopt. North Amer., suppl. 1, p. 42. 1927; Linsley, Ann. Ent. Soc. Amer. **29**: 477–478. 1936; Blackwelder, Cat. Coleopt. North Amer., suppl. 4, pp. 57, 59. 1939.

The bibliography given above for the genus is not complete, since only the more important articles are cited, especially those dealing with the United States species. In the papers by Melsheimer (1853), Lacordaire (1869), Gemminger and Harold (1872), Crotch (1873), Henshaw (1885, 1895), Aurivillius (1912), Leng (1920), Leng and Mutchler (1927), and Blackwelder (1939), a number of species of *Stenosphenus* are listed, but since these publications are only catalogues the citations are omitted from the bibliographies of the species.

The name *Stenosphenus* was first used by Dejean (1835) in his Catalogue des Coléoptères, where he included three species of which no descriptions had been published. Haldeman (1847) published a description of the genus, citing *Stenosphenus* Dej. Cat., including only *Callidium notatum* Olivier, under which he placed *discicollis* Dej. (nomen nudum) as a synonym. Thomson (1860, 1864), not knowing of the paper by Haldeman, likewise described *Stenosphenus* Dej. Cat. He also described *Stenosphenus cribripennis* Dej. Cat. (nomen nudum) and designated it as the type of *Stenosphenus* Thomson.

There has been considerable confusion in regard to the position of this genus in the family Cerambycidae. Lacordaire (1869) placed *Stenophenus* in the tribe Heteropsini, and was followed by Aurivillius (1912). LeConte (1873) proposed the tribe Stenosphenini for the genus *Stenosphenus*, placing it between the tribes Clytini and Phoracanthini, and stating that its affinities are equally with *Cyllene* and *Elaphidion*. Casey (Mem. Coleopt. **3**: 346. 1912) stated that "the spinose antennae suggests some of the next tribe (Clytini), and other features recall *Elaphidion*, but, on the whole, it is very isolated and without close allies." Linsley (1936) transferred the genus *Stenosphenus* from the tribe Heterospini to the tribe Sphaerionini, near the genus *Ironeus* Bates.

DESCRIPTION OF THE GENUS

Head small, flat between antennae, slightly declivous, front elongate; cheeks short; eyes finely granulated, deeply emarginate; antennal tubercles not or only slightly elevated. Antenna inserted on front more or less distant from mandibles, usually shorter than body in females, longer than body in males, slender, punctured, pubescent, and sparsely clothed with flying hairs; intermediate segments of males longitudinally carinate in some species; segment 1 robust, gradually expanded toward apex; segment 2 small; segment 3 longer than 4, which is subequal in length to each of the following segments, except 11, which is longer than segment 10 in the males; segments 3 to 7 or 8 spinose at apices on inner side. Palpi short, subequal in length, last segments nearly cylindrical at apices, not impressed. Pronotum rounded at sides, usually more strongly narrowed anteriorly, without spines or callosities. Scutellum broadly rounded at apex. Elytra elongate, slightly convex above; sides subparallel, rarely strongly narrowed posteriorly; tips truncate, or emarginate with the angles spinose; epipleura entire at base. Anterior coxae globose, not angulated externally. Middle coxal cavities closed externally. Prosternal process suddenly declivous and perpendicular at apex. Mesosternum broad, suddenly declivous anteriorly, truncate or emarginate posteriorly. Legs rather short; femora slightly expanded toward apices, not spinose at apices, posterior pair shorter than elytra; tibia longitudinally carinate; first segment of posterior tarsus as long as following two segments united.

Genotype.—*Callidium notatum* Olivier.

Stenosphenus is a moderately large genus, distributed throughout eastern Canada, eastern and southwestern United States, Mexico, Central America, and Cuba.

The differences in the sculpture of the prosternum in the two sexes are quite distinct, except in *notatus* and *pinorum*, both of which have the pronotum distinctly wider than long, widest at the middle, and the sides broadly rounded. In these two species the prosternum is vaguely punctured and feebly rugose in both sexes. In most of the species the depressed space extends from one side of the prosternum to the other and is coarsely punctured in the males. This space does not extend to the anterior margin and is usually divided into two parts by a smooth space extending from the anterior margin to the apex of the prosternal process. In the females the prosternum may be vaguely punctured, feebly rugose, or almost smooth. I cannot agree with Schaeffer (Journ. New York Ent. Soc. **19**: 125. 1911) that the sculpture on the prosternum in front of the coxae is very variable and cannot be relied upon for separating the species, for in examining large series of various species I found this character rather constant. *Stenosphenus beyeri* Schaeffer is the only species in which this character can be considered as variable; usually the depression is not separated by a smooth space, but at the most this space is very narrow.

KEY TO THE SPECIES OF STENOSPHENUS

1. Pronotum distinctly wider than long, equal in width at base and apex....2
   Pronotum as long as, or longer than, wide, at most only slightly wider than long, narrower at apex than at base....5
2. Femora red....3
   Femora black....4
3. Pronotum coarsely punctate, with a smooth median vitta; elytra black...*aridus* Linsley
   Pronotum not distinctly punctate; elytra chestnut brown....*castaneus* Casey
4. Pronotum unicolored, red or yellow....*pinorum* Casey
   Pronotum bicolored, red, with a blackish, median spot....*notatus* (Olivier)
5. Body uniformly brownish or reddish yellow.6
   Body not uniformly brownish or reddish yellow, but black to reddish brown, usually with the pronotum more reddish....7
6. Pronotum distinctly longer than wide; antenna with intermediate segments black, and one and one-fourth times as long as body in the male....*nigricornis*, n. sp.
   Pronotum not longer than wide; antenna uniformly brownish yellow and only slightly longer than body....*debilis* Horn
7. Femora entirely black....8
   Femora in greater part red or reddish yellow....10
8. Punctures and pubescence on elytra arranged in longitudinal spaces, which are separated by longitudinal smooth intervals....*lugens* LeConte
   Punctures and pubescence on elytra uniformly distributed....9
9. Pronotum distinctly punctured; tips of elytra truncate....*beyeri* Schaeffer
   Pronotum not distinctly punctured; tips of elytra bispinose....*dolosus* Horn
10. Elytra black....11
    Elytra reddish brown....14
11. All femora reddish....12
    Only posterior femora reddish. Antenna not longer than body in male, shorter than body in female; male with punctured depression on prosternum not separated by a smooth median area....*rossi* Linsley
12. Pronotum distinctly punctured; tips of elytra strongly bispinose....*novatus* Horn (*lucanus* Casey)
    Pronotum not distinctly punctured; tips of elytra not strongly bispinose....13
13. Antenna shorter than body in both sexes....*basicornis* Linsley
    Antenna at least as long as body in female, longer than body in male....*lepidus* Horn
14. Pronotum distinctly punctured; tibiae pale reddish brown....*pruddeni* Casey
    Pronotum not distinctly punctured; tibiae black....15
15. Male with punctured depression on prosternum separated by a smooth median area; tips of elytra emarginate, bispinose. Female unknown....*arizonicus* Linsley
    Male with punctured depression on prosternum not separated by a smooth median area; tips of elytra not emarginate or distinctly bispinose. Female unknown....*longicollis* Casey

Stenosphenus aridus Linsley

Stenosphenus aridus Linsley, Ent. News **46**: 166. 1935.

Black, strongly shining; prothorax and femora rufous, the former at sides and apex and latter at apices slightly piceous. Pronotum transverse, rounded at sides, coarsely, irregularly punctate at sides, smooth at middle. Elytra rather coarsely, uniformly punctate, rather densely, uniformly clothed with long, semierect, pale hairs, apices emarginate, outer angles dentiform. Prosternum in male coarsely punctate and depressed on each side of median, smooth carina. Female unknown. Length 10 mm, width 2.5 mm. This species has not been seen by the writer and has been placed in the key entirely upon the characters given in the original description.

Type locality.—Zion National Park, Utah.

Type.—In the California Academy of Sciences.

This species was described from two males reared from small branches of *Populus fremontii* collected at the type locality, May 16–21, 1934, by Donald DeLeon.

Stenosphenus castaneus Casey

Stenosphenus castaneus Casey, Mem. Coleopt. **11**: 269. 1924.

Uniformly reddish brown; the thorax slightly more reddish, strongly shining. Pronotum widest at middle; sides broadly rounded; surface nearly impunctate, with a few punctures toward sides, and a few rather long, inconspicuous hairs. Elytra finely, sparsely, uniformly punctate, sparsely clothed with moderately long, semierect, fine, inconspicuous hairs, apices obliquely truncate, the lateral angle spinose, sutural angle slightly produced. Prosternum in female feebly, transversely rugose, and indistinctly punctate, not depressed. Length 10.5 mm, width 3 mm.

Type locality.—Texas, locality unrecorded.

Type.—In the Casey Collection, United States National Museum.

This species was described from a single female. In the Museum Collection there is a male specimen, which is labeled Capitan Mountains, New Mexico, and which agrees with the type except that the antennae and legs are slightly darker, and the prosternum is depressed and coarsely, rather densely punctured and separated at the middle by a smooth, longitudinal elevation.

Stenosphenus pinorum Casey

Stenosphenus pinorum Casey, Mem. Coleopt. **11**: 268–269. 1924.

Black to reddish black, strongly shining; prothorax and underside of head uniformly reddish yellow. Pronotum widest at middle; sides broadly rounded; surface indistinctly punctate, sparsely clothed, especially at sides, with short, recumbent, yellowish-white hairs. Elytra sparsely, uniformly, finely punctate, sparsely, uniformly clothed with short, semierect, whitish hairs; apices separately emarginate, both angles acute, the lateral tooth slightly longer than sutural one. Prosternum indistinctly punctate in both sexes. Length 9.5–16 mm, width 4–2.5 mm.

Type locality.—Southern Pines, N. C.

Type.—In the Casey Collection, United States National Museum.

This species was described from a single male collected by Abram H. Manee. Specimens have been examined from Florida, District of Columbia, New Jersey, North Carolina, and Virginia. This species has been reared from hickory (*Hicoria* spp.).

Stenosphenus notatus (Olivier)

Callidium notatum Olivier, Entom., Gen. 70, **4**: 61, pl. 7, fig. 89. 1795.

Stenosphenus notatus Haldeman, Trans. Amer. Phil. Soc. (ser. 2) **10**: 39. 1847; Horn, Trans. Amer. Ent. Soc. **12**: 178, 180. 1885; Leng, Ent. Amer. **2**: 193. 1887; Hamilton, Can. Ent. **20**: 66. 1888; Insect Life **4**: 130. 1891; Wickham, Can. Ent. **29**: 149. 1897; Blatchley, Coleoptera of Indiana, p. 1032. 1910; Craighead, Canada Dept. Agr. (new ser.) Bull. 27 (Ent. Bull. 23): 72–73, pl. 15, fig. 8, pl. 21, fig. 6. 1923.

Elaphidion notatum LeConte, Journ. Acad. Nat. Sci. Philadelphia (ser. 2) **2**: 12. 1850.

Elaphidion deflendum Newman, Entomologist, London, **1**: 6. 1840; Haldeman, Proc. Amer. Phil. Soc. **4**: 376. 1847.

Stenocorus discoideus Sturm, Cat. Ins. Samml., p. 199. 1826.

Stenosphenus discicollis Dejean, Cat. Coleopt., ed. 3, p. 330. 1835; ed. 3, rev., p. 355. 1836.

Black, strongly shining; pronotum and underside of head reddish yellow, the former with large discal black spot. Pronotum widest at middle; sides feebly, broadly rounded; surface indistinctly punctate, sparsely clothed, especially at sides, with short, recumbent, yellowish-white hairs. Elytra finely, sparsely, uniformly punctate, sparsely, uniformly clothed with short, semierect, whitish hairs; apices separately emarginate, both angles acute, the lateral tooth slightly longer than sutural one. Prosternum indistinctly punctate in both sexes. Length 9–16 mm, width 2.5–4 mm.

Type locality.—Of *notatum*, New York. Of *deflendum*, Georgia. Of *discicollis* and *discoideus*, Amerique borealis.

Types.—*S. notatus*, probably in Paris Museum; *deflendum* and *discicollis*, in the British Museum; *discoideus*, in the Munich Museum before the war.

This species is widely distributed throughout the eastern part of Canada and the United States, as far west as the Rocky Mountains. It is very common, breeding in the dead limbs of hickory and pecan, and rarely in *Celtis* sp.

The larvae bore into the dead limbs of its host plants, pupating the latter part of the second year, and becoming adults before winter, but remaining in the wood until the following spring.

Stenosphenus nigricornis, n. sp.

Male.—Elongate, slender, slightly flattened, moderately shining, uniformly brownish yellow, except intermediate segments of antenna, which are black, and head and pronotum, which are slightly more reddish.

Head coarsely, irregularly, rather densely punctate, with a narrow, median groove extending from occiput to clypeus; antennal tubercles shining, scarcely punctate. Antenna one and one-fourth times as long as body; segments 3 to 7 spinose at apices, the spines gradually decreasing in length toward apex of antenna, sparsely clothed with short, recumbent, white hairs with a few longer, semierect hairs intermixed; segment 1 cylindrical, slightly expanded toward apex; segment 3 one and one-half times as long as segment 1, the following segments gradually diminishing in length except the eleventh, which is longer than tenth.

Pronotum distinctly longer than wide, slightly narrower at apex than at base; sides slightly rounded; surface sparsely, coarsely, irregularly punctate, sparsely clothed at sides with short, recumbent, and long, erect, whitish hairs.

Elytra at base slightly wider than pronotum at middle; sides feebly converging from bases to near tips, which are separately transversely, sinuately truncate, with sutural and lateral angles slightly produced; surface densely, coarsely, uniformly punctate, the punctures separated by about their own diameter, rather densely, uniformly clothed with long, semierect, white hairs.

Abdomen beneath smooth; nearly impunctate, rather densely clothed at sides with moderately long, recumbent, white hairs; last sternite truncate at apex. Prosternum smooth in front, the very coarsely punctured area not divided at middle by a smooth median area.

Length 9 mm, width 2 mm.

Type locality.—Yuma, Calif.

Type.—In the United States National Museum, no. 57688.

Described from a single male collected during August by H. F. Wickham.

This species is closely allied to *Stenosphenus debilis* Horn, but it differs from that species in having the intermediate segments of the antenna black and the pronotum distinctly longer than wide.

Stenosphenus debilis Horn

Stenosphenus debilis Horn, Trans. Amer. Ent. Soc. **12**: 178, 179–180. 1885.

Uniformly brownish or reddish yellow, subopaque. Pronotum widest at middle, broadly rounded at sides, coarsely, sparsely, irregularly punctate, sparsely clothed with short, semierect, whitish hairs. Elytra rather densely, finely, uniformly punctate, sparsely, uniformly clothed with short, semierect, yellowish-white hairs; apices separately obliquely, sinuately truncate, the outer angle short and acute. Prosternum in male rather densely, coarsely punctate, not separated at middle by a smooth space, in female very finely, transversely rugose and punctate. Length 7.5–12 mm, width 2–3 mm.

Type locality.—Utah, locality unrecorded.

Type.—In Horn Collection, Academy of Natural Sciences of Philadelphia.

This species was described from two males. Specimens of both sexes have been examined which were collected in Utah by E. Palmer and by Hubbard and Schwarz. The females are slightly more robust than the males, and the antennae are slightly shorter than the body. Horn states that the pronotum is longer than wide, although in all the specimens examined the pronotum is as wide as long. The type has not been examined.

Stenosphenus lugens LeConte

Stenosphenus lugens LeConte, Proc. Acad. Nat. Sci. Philadelphia, 1862, p. 41; Horn, Trans. Amer. Ent. Soc. **12**: 178, 180. 1885; **13**: Proc. p. xii. 1886; Leng, Ent. Amer. **2**: 193. 1887; Schaeffer, Journ. New York Ent. Soc. **19**: 125. 1911.

Stenosphenus hirsutipennis Bates, Trans. Ent. Soc. London, 1872, p. 191 (note); Biol. Centr.-Amer., Coleopt., **5**: 67. 1880; p. 313, 1885.

Black, shining; head and thorax red. Pronotum widest at middle, broadly rounded at sides, nearly impunctate and glabrous. Elytra, rather coarsely, uniformly punctate, sparsely, uniformly clothed with short, semierect, yellowish-white hairs; the punctures and hairs arranged in longitudinal spaces separated by

smooth intervals; apices separately emarginate; angles acute, the lateral tooth slightly longer than sutural one. Prosternum in male very coarsely, sparsely punctate at sides, separated at middle by a smooth, longitudinal elevation, in the female smooth and indistinctly punctate. Length 10–14 mm, width 2.5–3.5 mm.

Type locality.—Of *lugens*, Texas, no definite locality. Of *hirsutipennis*, Mexico, no definite locality.

Type.—*S. lugens*, in LeConte Collection, Museum of Comparative Zoology; *hirsutipennis*, in the British Museum.

A series of adults has been examined from Brownsville, Tex., and a number of other specimens labeled *hirsutipennis* from Jalapa and Alomolonga, Mexico. All these specimens were identical, and uniform in coloration. The adults have been reared from Huisache (*Acacia farnesiana*) collected at Brownsville, Tex.

Bates (1885) stated that *hirsutipennis* differed from *lugens* in having a red thorax, but this statement is incorrect, since both species have the thorax red, and Horn (1886) placed *hirsutipennis* Bates (1872) as a synonym of *lugens* LeConte (1862).

Stenosphenus beyeri Schaeffer

Stenosphenus beyeri Schaeffer, Brooklyn Inst. Mus., Sci. Bull. **1** (7): 163–164. 1905; Journ. New York Ent. Soc. **19**: 125. 1911.

Black, strongly shining; prothorax entirely black or in part red. Pronotum widest at middle; sides broadly rounded; surface coarsely, densely, irregularly punctate, sparsely clothed with short, semierect, inconspicuous hairs. Elytra densely, finely, uniformly punctate, rather densely clothed with short, semierect, yellowish-white hairs; apices transversely truncate, the angles not produced. Prosternum in male opaque, coarsely, densely punctate and at most only separated at middle by a very narrow, longitudinal smooth space, in the female moderately shining, transversely rugose, and sparsely punctate. Length 10.5–13.5 mm, width 2.75–3.5 mm.

Type locality.—Palmerlee, Cochise County, Ariz.

Lectotype.—In the United States National Museum.

Schaeffer described this species from a series of specimens and labeled them all types without selecting a holotype. A female collected at the type locality during August is here selected as the lectotype.

Adults have been examined from the following localities in Arizona: Miller's Canyon, Huachuca Mountains, Santa Catalina Mountains, Redington, and Prescott National Forest. There is one specimen in the collection labeled simply "N. M." The pronotum varies in color from uniformly black or red to red with the anterior and posterior margins black. This species has been reared from New Mexico locust (*Robinia neomexicana*) and little walnut (*Juglans rupestris*).

Stenosphenus dolosus Horn

Stenosphenus dolosus Horn, Trans. Amer. Ent. Soc. **12**: 178, 179. 1885; Leng, Ent. Amer. **2**: 193, 194. 1887; Schaeffer, Journ. New York Ent. Soc. **19**: 125. 1911.

Reddish brown, strongly shining; prothorax red; legs black. Pronotum widest at middle; sides broadly rounded; surface indistinctly punctate and nearly glabrous. Elytra finely, densely, uniformly punctate, rather densely, uniformly clothed with short, semierect, whitish hairs; apices separately obliquely truncate; the lateral angle short and acute; sutural angle slightly produced. Prosternum with the densely, finely punctured depression separated at middle by a narrow, smooth, longitudinal elevation in the male; feebly, transversely rugose, and indistinctly punctate in the female. Length 7–14 mm, width 2–3.5 mm.

Type locality.—Southwestern Texas.

Type.—In the Horn Collection, Academy of Natural Sciences of Philadelphia.

Described from both sexes. A large series of adults have been examined from various localities in Texas. The species has been reared from mesquite (*Prosopis juliflora*) and *Acacia* sp. The coloration is uniform in the large series of adults examined.

Stenosphenus rossi Linsley

Stenosphenus rossi Linsley, Proc. California Acad. Sci. (ser. 4) **24**: 45–46, pl. 4, fig. 8. 1942.

Black, shining; posterior femora reddish. Pronotum narrowed anteriorly, rounded at sides, surface nearly impunctate, glabrous except for a few erect hairs at sides. Elytra coarsely but not closely punctate, clothed with moderately long, semierect hairs; apices separately emarginate; the angles acute or sub-

spiniform. Prosternum with depression coarsely punctate, but not separated at middle by a smooth, longitudinal elevation in male, depression vague, finely rugose, and punctate in female. Length 7.5–8.5 mm, width not given.

This species is not represented in the National Museum Collection and has been given its position in the key from the characters given in the original description.

Type locality.—San Domingo, Lower California.

Type.—In the California Academy of Sciences.

This species was described from 16 specimens collected on a flowering leguminose shrub at the type locality, July 19, 1938, by A. E. Michaelbacher and E. S. Ross.

Stenosphenus novatus Horn

Stenosphenus novatus Horn, Trans. Amer. Ent. Soc. **12**: 178–179. 1885; Leng, Ent. Amer. **2**: 193. 1887; Horn, Proc. California Acad. Sci. (ser. 2) **4**: 338. 1894; Schaeffer, Journ. New York Ent. Soc. **19**: 125. 1911; Grossbeck, Bull. Amer. Mus. Nat. Hist. **31**: 325. 1912; Linsley, Pan-Pacific Ent. **10**: 60. 1934; Proc. California Acad. Sci. (ser. 4) **24**: 44–45. 1942.

Stenosphenus lucanus Casey, Mem. Coleopt. **3**: 346. 1912.

Black, moderately shining; thorax and femora red, the former sometimes with anterior and posterior margins blackish. Pronotum widest at middle; sides rounded, more strongly narrowed anteriorly; surface coarsely, sparsely, irregularly punctate, nearly glabrous. Elytra rather densely, coarsely, uniformly punctate, sparsely, uniformly clothed with very short, semierect, white hairs; apices separately deeply emarginate, angles spiniform, the lateral spine longer than sutural one. Prosternum in male with two densely, finely punctured depressions separated at middle by a smooth, longitudinal elevation, in the female very finely rugose and punctate, but not depressed. Length 9.5–12.5 mm, width 2.5–3.5 mm.

Type locality.—Of *novatus*, Cape San Lucas, Lower California. Of *lucanus*, Lower California, no definite locality.

Type.—*S. novatus*, in the Horn Collection, Academy of Natural Sciences of Philadelphia; *lucanus*, in the Casey Collection, United States National Museum.

Casey described *lucanus* from a single male, which is identical with specimens of *novatus* from the Cape Region of Lower California. A good series of adults, which show no variations in color, has been examined from the following localities in Lower California: Santa Rosa, San José del Cabo, and Purissima. Linsley (1942) records it from Miraflores and San Pedro, Lower California.

Stenosphenus basicornis Linsley

Stenosphenus basicornis Linsley, Pan-Pacific Ent. **10**: 60. 1934; Proc. California Acad. Sci. (ser. 4) **24**: 45, 1942.

Rufous, shining; elytra and abdomen black; femora rufous, tibiae piceous at bases, black at apices; antennal segments 1 and 2 rufous, following segments piceous. Pronotum narrowed anteriorly, rounded at sides; surface smooth with a few scattered punctures, and erect, pale hairs. Elytra coarsely, uniformly, sparsely punctate, clothed with semierect, pale hairs, apices sinuately truncate, the angles dentiform. Prosternum coarsely, cribrately punctate at sides, and separated at middle by a shining, longitudinal line in the male, finely and densely punctate in female. Length 7.3 mm, width 2.5 mm.

This species is unknown to the writer, and has been placed in the key entirely upon the characters given in the original description.

Type locality.—Tiburón Island, Gulf of California.

Type.—In the California Academy of Sciences.

This species was described from three specimens collected on a species of mesquite (*Prosopis* sp.) at the type locality July 5, 1921, by E. P. Van Duzee.

Stenosphenus lepidus Horn

Stenosphenus lepidus Horn, Trans. Amer. Ent. Soc. **12**: 178, 179. 1885; Leng, Ent. Amer. **2**: 193, 194. 1887; Casey, Ann. New York Acad. Sci. **6**: 34–35. 1891; Schaeffer, Journ. New York Ent. Soc. **19**: 124–125. 1911.

Black, shining; femora red, sometimes blackish at apices; thorax entirely red or black, sometimes red with anterior and posterior margins black. Pronotum widest at middle, broadly rounded at sides; surface sparsely, indistinctly punctate and nearly glabrous. Elytra rather coarsely, sparsely, uniformly punctate, sparsely, uniformly clothed with short, semierect, white hairs; apices trans-

versely truncate, the angles only slightly produced. Prosternum in male with depression finely, densely punctate, separated at middle by a transversely rugose, longitudinal space; in female finely, transversely rugose and indistinctly punctate. Length 9–14 mm, width 2–3.5 mm.

Type locality.—Arizona, no definite locality.

Type.—In the Horn Collection, Academy of Natural Sciences of Philadelphia.

Horn described this species from two males. The color of the pronotum is quite variable, being entirely black or red, or black with the disk reddish. Material has been examined from the following localities in Arizona: Fort Grant; Douglas; Ramsey Canyon, Huachuca Mountains; and San Bernardino Ranch, Cochise County. Schaeffer (1911) placed *Stenosphenus longicollis* Casey as a synonym of *lepidus*, but it seems to be a valid species.

Stenosphenus pruddeni Casey

Stenosphenus pruddeni Casey, Mem. Coleopt. **3**: 346–347. 1912.

Reddish brown; prothorax and legs more reddish, moderately shining. Pronotum widest behind middle; sides slightly rounded, more strongly narrowed anteriorly; surface coarsely, sparsely, irregularly punctate, sparsely clothed with rather long, semierect, whitish hairs. Elytra rather coarsely, densely, uniformly punctate, sparsely, uniformly clothed with moderately long, semierect, inconspicuous hairs; apices transversely sinuately truncate, the lateral angle spinose, sutural angle slightly produced. Prosternum feebly, transversely rugose and indistinctly punctate, but not depressed. Length 11.5 mm, width 3 mm.

Type locality.—Canyon of the Colorado, Ariz.

Type.—In the Casey Collection, United States National Museum.

Casey described this species from a single female collected at the type locality by T. Mitchell Prudden. In the Museum Collection are two additional females collected at the same locality, July 12–13, 1901, by Barber and Schwarz.

Stenosphenus arizonicus Linsley

Stenosphenus arizonicus Linsley, Ent. News **46**: 165–166. 1935.

Rufous; antennae, tibiae, and tarsi black; abdomen piceous. Pronotum strongly narrowed anteriorly, feebly rounded at sides, smooth with a few scattered fine punctures, and sparsely clothed with fine, semierect hairs. Elytra finely, uniformly punctate, sparsely clothed with semierect, pale hairs; apices separately emarginate, the angles spiniform. Prosternum broadly depressed, coarsely, cribrately punctate on each side of a median, polished elevation in the male. Female unknown. Length 12.5 mm, width 3 mm.

This species has not been seen by the writer, and has been placed in the key entirely upon the characters given in the original description.

Type locality.—Globe, Ariz.

Type.—In the California Academy of Sciences.

Linsley described this species from a single male collected at the type locality during August 1930, by D. K. Duncan.

Stenosphenus longicollis Casey

Stenosphenus longicollis Casey, Ann. New York Acad. Sci. **6**: 34–35. 1891; Mem. Coleopt. **3**: 347. 1912.

Brownish black, moderately shining; thorax and femora reddish, the pronotum slightly brownish toward sides. Pronotum widest behind middle; sides slightly rounded, more strongly narrowed anteriorly; surface indistinctly punctate toward sides, with a few moderately long, semierect, whitish hairs. Elytra rather coarsely, densely, uniformly punctate, sparsely, uniformly clothed with rather short, semierect, whitish hairs; apices separately transversely, sinuately truncate, the angles scarcely produced. Prosternum with large depression, coarsely, densely punctate, not divided at middle by a smooth, longitudinal elevation in the male. Female unknown. Length 11 mm, width 2.75 mm.

Type locality.—Texas, locality unrecorded.

Type.—In the Casey Collection, United States National Museum.

Casey described this species from a single male probably received from G. W. Dunn. In the original description he states that the prothorax is distinctly longer than wide. The prothorax of the type was found to be not distinctly longer than wide, but subequal in length and width. It seems to be a valid species, and not a synonym of *lepidus* Horn as suggested by Schaeffer (Journ. New York Ent. Soc. **19**: 124. 1911).

Stenosphenus sobrinus (Newman)

Elaphidion sobrinum Newman, Entomologist, London, 1: 30. 1840; LeConte, Journ. Acad. Nat. Sci. Philadelphia (ser. 2) 2: 15. 1850.
Stenosphenus sobrinus Bates, Biol. Centr.-Amer., Coleopt., 5: 66. 1880; p. 312, 1885; Horn. Trans. Amer. Ent. Soc. 12: 180. 1885; Leng. Ent. Amer. 2: 194. 1887.

This species was described by Newman from North America. So far it has not been collected in the United States, but Horn (1885) states that this species, described erroneously from the United States, is abundant at San Luis Potosi, Mexico, and should not be included in our lists.

Stenosphenus pristinus Wickham

Stenosphenus pristinus Wickham, Bull. Mus. Comp. Zool. 58: 463–464, pl. 9, fig. 2. 1914.

This fossil species was described from a specimen collected in the Miocene shales at Florissant, Colo. Type No. 2584 in the Museum of Comparative Zoology, Cambridge, Mass.

ENTOMOLOGY.—*A new African species of* Paurocephala *Crawford (Homoptera: Psyllidae: Pauropsyllinae).*[1]

LOUISE M. RUSSELL, U. S. Bureau of Entomology and Plant Quarantine. (Communicated by C. F. W. MUESEBECK.)

This paper provides a name for a psyllid collected from *Urena lobata* Linnaeus, a member of the Malvaceae now grown commercially in the Belgian Congo as a substitute for hemp. Numerous specimens were received with the request that the species be described if new. It is closely related to *Paurocephala gossypii* Russell, a pest of *Gossypium* (Malvaceae) in the Belgian Congo. Adults of the two species resemble each other closely; the nymphs differ conspicuously, however, particularly in the earlier stages. The most salient differences between the two forms are in the relative length and slenderness of the antennae of the adults, in the relative proportions of the male genitalia, in the color of adults and nymphs, in the number of sectasetae of the nymphs and the relative size of the tuberclelike prominences bearing them, and in the presence or absence of cephalothoracic tubercles in the first four nymphal stages.

Paurocephala urenae, n. sp.

With few exceptions the following description mentions only the characters of *urenae* which differ from those of *gossypii*. Other characteristics of *urenae* (those common to both species) may be found in the description[2] of *gossypii* (Proc. Ent. Soc. Washington 45: 115–120, illus. 1943).

Adults.—Length to tip of folded wing, 1.75–2 mm; length of body as mounted on slide, 2–2.25 mm; length of forewing, 1.50–1.75 mm, width, 0.50–0.75; length of hind wing, 1.15–1.35 mm, width, 0.40–0.50; width of head, 0.50–0.55 mm; females usually larger than males; bodies slightly less stout than in *gossypii*.

Females pale yellow, males pale orange; each brownish only on eyes, distal antennal segment, tip of labium, second tarsal segment and claws of anterior leg, a small spot before end of anal vein and at end of Cu_2; also occasionally but not characteristically brownish at end of other veins and at ends of posterior five tergites of female.

Antenna about one-fifth longer than width of head, more slender, and the relative length of some segments different than in *gossypii*, as illustrated.

Genitalia of female about two-thirds length of rest of distended abdomen.

Genitalia of male with proctiger about one-fourth longer than wide and about one-tenth longer than claspers; claspers slender, their peglike teeth less stout and their sawlike teeth weaker than in *gossypii*.

Fifth-stage nymph.—Length as mounted,

[1] Received November 23, 1945.

[2] The following additions and corrections should be inserted in the description of *gossypii:* Page 116 line 3, for "segments 1–5," read "segments 1–4"; page 117 last line and page 118 first line, for "whorls of . . . segment," read "whorls of 3 sectasetae each, 1 sectaseta just beyond middle of segment, 1 small sensorium opposite each whorl of sectasetae and opposite the single sectaseta"; page 120 line 14, for "2 sectasetae," read "1 (or 2, one small basal seta sometimes replaced by a sectaseta) sectaseta just before middle of segment, 1 small sensorium opposite it."